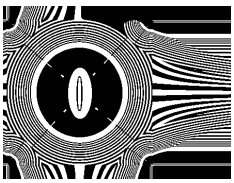

PLANNING FOR SUSTAINABLE DEVELOPMENT: THE SIGNIFICANCE OF DIFFERENT SOCIAL INTERESTS IN LANDSCAPE

Sonja BUTULA
Faculty of Agriculture, Zagreb

UDK: 504.03
Stručni rad
Primljeno: 21. 1. 2003.

The paper provides an insight into sustainable development as the basic principle to be followed in the planning activity the goal of which is to protect or enhance the things we, as society, value. The subject of that endeavour is frequently directed towards landscape. The legacy of landscape evaluation present among the Croatian professional community is that landscape values are perceived as a visual and aesthetic category. The conservation idea in planning focuses less on values attached to desired goals which are as a rule the result of opposing interests: developmental and conservational. This paper concentrates on the character of those values as appropriate for the sustainability concept implementation. It first indicates and then expounds the possible reasons for disagreement and contradictions concerning the meaning and interpretation of sustainable development. Subsequently, an approach is proposed towards evaluating landscape which enables both efficient protection and development. The practice of achieving sustainable development in Croatia from the aspect of conservation planning is analysed in the third part, especially the mechanism of public participation in the decision-making process regarding landscape planning and landscape evaluation tools.

✉ Sonja Butula, Faculty of Agriculture, University of Zagreb, Svetošimunska 25, 10000 Zagreb, Croatia.
E-mail: butula@agr.hr

INTRODUCTION

The moderation of human needs and natural resource bases necessary to sustain these needs is a much older challenge than the introduction of the sustainable development concept into the global arena by the Brundtland report in 1987.

Since then and despite the fact that sustainability is fraught with ambiguities of different kinds, it has become the basic and general principle of man-nature relationship in the present time. The endeavour toward the sustainable use of resources and the achievement of environmentally sustainable forms of development are topics of numerous debates. The proponents of sustainable development often differ in departure points for discussion as well as in the understanding of the meaning of the term. These differences in opinion are characteristic not only of political circles and spatial policy decision makers, but also of those directly involved in the spatial planning processes who have to seek and provide solutions in the terms of certain future land use, based on the concept of sustainable development.

Disagreements, or even controversies among those directly involved in the spatial planning processes exist especially upon approaches toward conservational issues. That could be due to the substantive nature of sustainability itself, as argued by O'Riordan (1985), Lafferty (1995), Jacobs (1995): it is readily and broadly accepted, but around a given set of core ideas deeper contestation exists. Another reason may be a lack of necessary shift in thinking: rather than to concentrate on unity and precision of the term, sustainable development should be perceived as a catalyst to genuinely creative thinking and practice, as O'Riordan (1985) proposed; Jacobs (1996) argued that sustainability is best understood by asking people to articulate its character, i.e. to gain a notion or vision of where we would like to end up. The third reason may be inability, in the widest sense, to reconcile conservational intangibilities with tangible developmental criteria.

An additional factor confusing the issues in environmental discourses is that different and numerous disciplines are sharing a common subject matter: landscape.[1]

Here, diversification of efforts for sustainability is reflected. A number of environmental, that is conservational disciplines and activities are coping with environmental problems in our society. Also, disciplines such as forestry or agriculture, once solely developmental, are gradually changing into conservational ones.

How to master and direct processes that will lead to a more balanced relation between developmental action and efficient environmental protection is still an open question in Croatia.

THE DEMAND FOR SUSTAINABILITY AND ITS REFLECTION ON ENVIRONMENTAL PLANNING

Looking at sustainability as an environmental planning construct, its two characteristic features are to be discussed. Both are perceived as subject areas where striving for sustainable development has significant reflection, thus increasingly high-

lighted in literature (e.g. O'Riordan, 1995; Davies, 2001; Boersema, 2001). Any planning activity, therefore environmental planning too, is both future orientated and value laden activity. The task of environmental planning is to provide a suitable solution that will assure an environment that is equally pleasant and healthy as a human habitat, long-term productive and last but not least, naturally possible. Another distinction of environmental planning is based on the premise that the subject of conservation efforts is a specific quality of the physical landscape component, not the physical component itself.

Inevitably, as Golobič (2002, p. 197) pointed out, a landscape "is a reflection of socio-scape as it depends on the processes which regulate the choice of goals and aspirations and the ways of their materialization in space". Inevitable, too, is landscape's physical change due to the human right to take advantage of technological developments to improve their living conditions, and the society's right to protect it. It is inevitable, especially in practice of sustainable development implementation, according to Jacobs (1991) that a conflict between development and conservation remains. Uneasy partners is how Baker et al. (1997) have named economic growth and environmental protection. It is exactly this opposing duality of criteria in its evaluation phase that the conservation activity within environmental planning is based on. In order to tackle issues imposed by sustainable use, these two criteria are indispensable as carriers of opposing social value systems attached to a landscape. Only when the two are confronted – that is when simulation of consequences of each one upon the other are known – it is possible to compromise. Social values attached to a landscape have to be explicitly disclosed within the planning process, because they will otherwise remain hidden or unravelled, that is they will remain unknown to the planner. Another reason why social values should be externalised is that they are always expressed as ideals and often conflicting. Everybody is pro-conservation oriented. But the central question is: to what extent is someone ready to accept it, or where does the conservational encroach upon developmental interest in a landscape, and vice versa? The planner assignment is to deidealize both social values attached to a landscape. If not, he/she cannot check the possibilities for fulfilment of different and opposing aspirations for a landscape. The possibilities for either (development claim and/or conservation claim) are usually lower than initially conceived.

Within such a framework, the following questions are posed by planning experts that strive to sustainability: have we anticipated all that is necessary to fit the projected future,

whose or what values have entered into the planning process, who should be involved in decision making and when. It is believed that answering them might indirectly lead to, or help progress to socially responsible planning, therefore more acceptable planning outputs. As a direct result of such concerns, the issue of uncertainty – that means undefined knowledge that is needed, but unavailable,[2] traditionally silent within the planning community, but not unknown – is nowadays in focus. In order to illustrate that type of uncertainty which Marušič (2002) pointed out to be the most important for the creative process, and this creative mode being an approach to sustainability, as mentioned earlier by O'Riordan (1985), let me quote the famous paradox from Plato's Meno in Mitchell (1977): "And how will you inquire, Socrates, into that which you do not know? What will you put forth as the subject of inquiry? And if you find what you want, how will you ever know that this is what you did not know?"

Yet, the phase of problem anticipation, a planning feature, is a more efficient way of problem solving than if it is the result of spontaneous processes in a given area.

The assertion is that the uncertainty factor should be acknowledged in a creative planning process. At the level of transformation of information, it can be defined as a process where input information is transformed into new information and such consecutive transformation leads to problem solution. The assertion is based on two lines of thoughts. The first is the theory of decision-making. Environmental planning is without any doubt a form of decision-making, because decisions are made that affect the present or future qualities of an environment, in fact interests of groups and individuals. Moreover, an environmental or any other decision is highly dependent on the clarity of the formulation of a certain problem. Understanding what the current difficulty is and what goal is to be achieved is the basic assumption for problem identification, (Chechile, 1991). Anticipation of obstacles, listed in Table 1, that are on the way to goal achievement is extremely difficult in conservation activities within environmental planning, due to the aforementioned uncertainty factor. The more heterogeneous information on social interests in the landscape is obtained, the more it is possible to alleviate the uncertainty factor.

The second argument for the uncertainty factor recognition is based on the assumption of the civil science concept.[3] In general, as O'Riordan (1995) argues, the complexity of contemporary man-nature relationship and resulting issues cannot any longer rely or be founded on the scientific, therefore objective knowledge only. Data gathering, analysis, building

and testing theories are no longer sufficient. O'Riordan claims that science, among other things, should be an interpreter of scientific data according to various parameters of political and ethical norms and should extend the power to those who are not always recognised as being important. Despite the fact that deeper elaboration of the relationship between science and planning exceeds the scope of this paper, quoting Taylor (1986, p. 51) should give an insight into what is perceived to be the key in understanding the differences between the roles of natural sciences and conservational planning, and to grasp the actual nature of the latter: 'The claim is frequently made that ecology shows us how to live in relation to the natural environment. ... The conclusion drawn from these considerations is that the science of ecology provides us with the model to follow in the domain of environmental ethics. This line of reasoning is not sound from the logical point of view. It confuses fact and value, "is" and "ought". ... But the ethical question: "How should human culture fit into the order of nature?" is not a question of biological fact. It is a question that confronts humans as moral agents, not as biological organisms, since it asks which way of relating ourselves to nature, among various alternatives open to our choice, is the ethically right one to adopt.'

It is believed that Taylor's clarification supports the premise that in order to tackle sustainability properly, landscape values should be recognised through research and interpretation of divergent social attitudes and a multitude of social interests toward a landscape, rather than through the research of intrinsic landscape values. Employing the apparatus of social interests and attitudes toward a landscape, the planner obtains necessary information and at the same time reduces the aforementioned uncertainties.

The origin of divergent conservation efforts is the dissatisfaction arising from conflicts that accompany different human actions in a landscape. Therefore, it seems appropriate to throw light on the sources of conservation conflicts, which are generators of environmental problems – the man-nature relationship.

THE TYPOLOGY OF ENVIRONMENTAL PROBLEMS

The relationship between human being and nature is articulated in two mainstream directions: anthropocentric and naturocentric. They are perceived as opposite approaches to conservation problem solving. In order to avoid the discussion on what course conservation should be based on, Marušič (1996) proposed an analysis of conservation claims to serve as a guideline while distinguishing the man-nature relationship.

He differentiated three types of relations, within which every environmental problem – that is the subject of conservation planning – is rooted:

– Man today vs. Man today
– Man today vs. Future man
– Man today vs. Nature

The proposed typology is in accordance with interpretations of the future generations needs concept; Boersema, (2001) saw it as a metaphor for "our own needs".

Each type of relation, as seen in Table 1, accompanies a different set of problems to be solved within planning, conservation objectives to be achieved, evaluation criteria to be employed, supported by its course in environmental ethic.

TABLE 1
Typology of conservation activities within environmental planning, adopted from Marušič (1996)

Conservation of human habitat	Resource conservation	Nature conservation
	Types of environmental conflicts	
Man today vs. Man today	Man today vs. Future man	Man today vs. Nature
	Ethical principle	
Respect of personal rights	Land ethics	As Least As Reasonably Achievable[4]/Respect for nature
	Types of environmental problems	
Degradation of human habitat	Irreversible use of resources	Loss of naturalness
	Uncertainties	
Unknown cause/ effect relationship Unknown relation between benefits and social cost	What will future generations really need	What is really important for nature
	Objectives of conservation	
Conservation and enhancement of human habitat	Sustainable productivity	Conservation of naturalness
	Subjects of conservation	
Qualities and amenities of environmental component	Productive, recreational, touristy potentials	Natural habitats and processes Natural successions
	Evaluation criteria	
Quality of human habitat	Sustainable yield and productivity	Undisturbed natural habitats and ecosystems

Recalling the introductory controversies in perceptions of, and/or approaches to conservational issues existing within the planning community, this trivalent form of conservation might illuminate the state of things. Conservation planning understood and carried as such provides the points of reference for distinctive assessments of a landscape that is confronted with a certain developmental action.

Let us consider for example a conservation objective based on, or in accordance with, certain social interest – the preservation of living environment qualities. For that purpose let us take the landscape component – soil. Unpolluted soil is sure-

ly a quality we look for. The most vulnerable to pollution are sandy soil types that easily absorb a contaminant. If the conservation aim is focused on maintaining the potential for agriculture, a soil type highly valuable and thus to be protected differs from the former. It is the type that enables high crop. If nature conservation is to be achieved, the third soil type is in focus: a type that characterises an undisturbed ecosystem in question or a type that will enable regeneration toward a climax stage. It is obvious that conservation values based on a particular social interest, as in this hypothetical example, could be spatially distributed within the same area in different ways. Distinctions between conservation of human habitat, resource conservation and nature conservation enable us to take into consideration the interests of the addressees. There is no need to assign priority to any of the previously mentioned planning goals – that is, a desired future state of a landscape. What is essential is the involvement of the whole spectrum of stakeholders, the public in general.

PLANNING THE CHANGE OF OUR COUNTRYSIDE – PRACTICE AND CHALLENGES

Significant landscape change is on the Croatian agenda in coming decades due to already known driving forces recognized in the EU countries. They include climate change, the impact of World Trade Organisation agreements on food production subsidies, the effects of the European Union enlargement and its impact on agricultural policy, the information revolution consequences for the nature of work, communication and settlements patterns. This wide frame calls, amongst other things, for focusing on two subject areas. The first is the involvement of the broader public in "spatial" decisions. The second is the scope of evaluation procedure where a value is actually attached to a certain landscape feature or component and thus the decision on change/not change made.

Both subject areas are discussed from the present Croatian practice perspective.

Communicating social interests in landscape

Focusing on the significance of different social interests in a landscape while anticipating future land uses that are in accord with the demand for sustainability, it seems reasonable to concentrate on the question where and how the necessary information can be obtained?

Information on social attitudes toward a landscape could be acquired in different ways. Most frequently used are: face-to-face interviews, questionnaires, public reviews and public hearings. They also differ while observed as forms of public inclusion into the planning process. The differentiation is

based on the position that brings them into the planning process. Face to face interviews and questionnaires are forms that precede actual planning or are positioned at the very beginning of problem formulation. Provisions from traditional participatory mechanism as Beierle (1996) named public reviews and public hearings follow a certain degree of decisions already made. In the Croatian example such participatory mechanism is incorporated into the legal decision-making procedure of regional and local spatial plans, (Šeparović, 1995). The framework presented in Table 2, illustrates the scale and scope of current social involvement within overall procedure.

➲ TABLE 2
Elaboration-adoption procedure of the spatial plan, adopted from Croatian legislative, ref. (*NN* 102/98)

Stage I	Draft of the plan proposal
Participants	State, regional/local authority bodies & authorized persons vested with public power NGO-s & Citizens – not mandatory
Stage II	Report on the draft Adoption → Preliminary plan
Participants	Decision maker & plan maker
Stage III	Public proceedings on Preliminary plan
Stage IIIa	Public review → written objections
Stage IIIb	Public hearings → objections and proposals, written or oral
Participants	State, regional/local authority bodies & authorized persons vested with public power NGO-s & Citizens
Stage IV	Report on Public proceedings → obligatory elaboration of objections and proposals
Participants	Decision maker & plan maker
Stage V	Examination of Preliminary plan and Report on Public proceedings
Participants	Decision maker & plan maker
Stage VI	Definition of Final plan proposal
Participants	Decision maker & plan maker
Stage VII	Substantiated opinion on rejected and partially accepted objections/proposals
Participants	Decision maker & plan maker
Stage VIII	Verification of Final plan Adoption → The plan
Participants	Decision maker

The dominant perception reflected in Stage I is that diversity and multitude of social interests in landscape are safeguarded by judgements of politicians, statutory consultees and organised groups of special interests that coincide with a certain economical sector. That could be the reason why individuals and groups outside organised groups, whose interests the former may not represent, are not mandatorily in-

cluded. According to previously mentioned information gathering, such perception is insufficient, whereas on the general level at least questionable. A limited public inclusion into planning system, and even more important – the public influence on the overall direction of the plan – are highlighted as general problem areas that surpass any national framework, (Healey, 1996). Both are observable in the example of the Report on public proceedings, (County of Istria, 1999). A quick review on nature and content of opinions expressed by lay people shows two things: their individual interests concerning a landscape are irrelevant to the plan and thus not taken into consideration; or they are relevant but unacceptable for the planning structures and therefore rejected. Both shortcomings are believed to be a challenge facing the multidimensional research as well as planning practices.

Landscape evaluation

Today, the planners are faced with an imperative to make landscape evaluation as a process open and transparent. In former times, nobody questioned on what basis a planner came up with an actual solution, (Lyle, 1985). Advocating an evaluation as a procedure that tends to be explicit, optimising and offering alternatives, an insight into its theoretical framework is given.

Landscape evaluation can be carried out in two ways: assigning a value to the present state of a landscape or assigning a value to an anticipated future state of a landscape.

The first way of assignment contains a verification of the existing state and its suitability to a desired concept. The second contains a verification of acceptance of such a state. Therefore, a value of the landscape or its component may be defined as a difference between the desired or goal state of the landscape, and the reality or real state of it. Evaluation is the process of assessing that difference.

Every developmental action that is to be taken in the landscape means a change of its present state. Is that change acceptable or not is the question directly dependent on interests involved and consequently planning purpose, as it has been argued. There is no evaluation that has no purpose. The types of evaluation procedure are presented in Table 3, according to the stage when conducted.

TABLE 3
Landscape evaluation types

	Developmental aspect	Conservational aspect
I Evaluation that precedes planning	Potentials	Degradations
II Evaluation as planning step	Attractiveness	Vulnerability
III Evaluation of planned solutions	Cost/benefit analysis	Environmental impact assessment

The Croatian practice in observing conservational measures is based on the landscape evaluation type I and III. As an example that characterises evaluation type I – that is apparently independent of planning – is designation of nature protection areas. A value is attached to a certain landscape feature or component that faces a high level of being degraded or lost in the worst-case scenario. The usual expert criteria[5] that are followed in the conservation through establishing reserves are rarity, typicality, uniqueness, and importance of natural phenomena.

Such evaluation reveals its real planning character in two situations, both perceived as problematic. First, by act of reservation, a certain area is directly excluded from being subject to other planning goals. Second, the standards, which prescribe designation of land area where a certain regime has to be followed, are implemented as solution to the envisaged problem, not really a defined problem. The concept functions well as long as areas in question are either small or as long as no kind of developmental aspiration is present. In most cases both rarely occur and that is where the problem starts. Since conservation measures are directly implemented as planning solutions, other interests present in society are overlooked. Inadequacy of standardisation[6] as a way to fulfil any of the conservational goals is that it excludes a possibility for developmental confrontation. The dialogue between those who stand behind a proposed developmental action and nature conservationists is impossible. The recent dispute is mirrored, for example, in the nature park Medvednica and the ski-resort developmental interests.

Problem solving that rests on prescribed solutions is not present only in the practice of nature protection. Landscape evaluation undertaken within the sphere of forestry, water management and agriculture, to name the main ones, is of the same type. Also, solving the problem of living environment degradation usually employs different standards and norms, like levels of acceptable noise and/or air pollution.

An example of evaluation type III is environmental impact assessment (EIA). Despite a long tradition[7] in the Croatian spatial planning practice, EIA still shows limitations as a conservation assessment tool. It evaluates a proposed or planned developmental project on the basis of sensitivity and vulnerability of environment affected by proposed human activity. The limits perceived here as important are: an overall impact assessment confirms only that the environmental "harm" will not exceed prescribed standards and norms; some impacts cannot be assessed due to the fact that there is no available standard to be followed. A typical example of such EIA limitation is an attempt to assess the impact on the visual quality of a landscape.

The types of evaluation discussed point out what is considered the major weakness – decisions are reached exclusively by employing the standardisation as the means to accomplish any of three previously defined conservational goals. It is not proper if the demand for sustainable development is to be accomplished. A shift towards decision optimisation or landscape evaluation type II is proposed. Such a shift would enable highlighting what still seem to be silent issues. In particular the perception that planning experts are infallible when value judgements are made, and in general, the misconception present in Croatian practice of evaluating a landscape, that it is and should be objective by nature and therefore the landscape should be assessed in advance of the spatial planning process. This is true as long as social interests in landscape are kept unarticulated. Disclosing divergent interests present in different social groups and individuals would reveal the real subjective nature of such evaluation. If and when decisions or proposed solutions to a problem are optimised, information on attitudes toward a landscape that derive from heterogeneous stakeholders involved will be needed.

CONCLUDING REMARKS

The ambiguity of the sustainability concept, as some argue, severely diminishes its usefulness; as sustainability is coupled with popularity, anything can be pronounced "sustainable". Proponents of these standpoints advocate the need for precise definition of the term in order to specify a set of measurable criteria so that agreement on development-conservation can be reached. From an alternative standpoint, sustainability is regarded as similar to concepts such as "democracy", "liberty" and "social justice" and such, in the way how it is implemented in practice. The activity of spatial planning in general, or its part – environmental planning in particular – is perceived here as the polygon where sustainability implementation is worth analysing. It is justified on the grounds that contemporary spatial planning is vested with the demand for sustainability. Today, the planner is no longer able to confine her/his view of the world to a plan that ignores the real world with real people in it. As an outcome, the participative approach to planning emerges as a counterpart to the prevailingly technocratic one which relies on hard facts and expert knowledge. Conservation activities as they are carried out in Croatian planning practice are based on the technocratic approach. The shift of focus to attitudes within society, potentially affected by a plan, is advocated. Information derived from the public is indispensable as a departure point to the evaluation phase. With such an approach, the limits of expert knowledge become more evident and at the same time

can be reduced. The most important contribution will be if the interests of users and potential users of the area concerned are not treated statically, but in a dynamic and communicative process. Foundations for the proposed are already extant and will soon be operational with the policy based on the Aarhus and Landscape conventions.

NOTES

[1] Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors, source European Landscape Convention, signed by Croatia in 2001.

[2] More information on distinction of the two types of uncertainty, see Chechile and Carlisle (1991).

[3] Kai Lee's definition of the term is that civic science is the process through which scientific analysis, threading its way through uncertainty and vast areas of uncharted territory called "social judgement to future options" opens its activity to public involvement and responsiveness, in O'Riordan (1995, p. 11).

[4] The ethical principle As Least As Reasonably Achievable (ALARA), introduced by Taylor (1986, 57): "There must be no available alternative that is known to be equally effective but to cause less harm to attacking organisms". The principle requires minimal harm to the human environment and minimal harm to the natural components of the environment.

[5] Criteria adopted from *The Act on Biological Diversity Convention* (*NN*. Int. Agreements 6/96).

[6] Within this context standardisation is defined as way to fulfil or direct conservation problem-solving that follows a solution which was prepared in advance, tested as reliable and can be widely implemented. Simon, (1981), introduced the term.

[7] EIA was introduced as the obligatory conservation tool in 1984.

REFERENCES

Baker, S., Kousis, M., Richardson, D. and Young, S. (1997), *The Politics of Sustainable Development*. Routledge. London.

Beierle, T. C. (1996), *Public Participation in Environmental Decisions: An Evaluation Framework Using Social Goals*. http://www.rff.org/CFDOCS/disc_papers/PDFfiles/9906.pdf

Boersema, J. J. (2001), How to Prepare for the Unknown? On the Significance of Future Generations and Future Studies in Environmental Policy. *Environmental Values*, 10: 35-58.

Chechile, R. A. (1991), Introduction to Environmental Decision Making. In: R. A. Chechile and S. Carlisle (Eds.), *Environmental Decision Making: A Multidisciplinary Perspective*. Van Nostrand Reinhold. New York.

Council of Europe (2000), *European Landscape Convention*. http://www.coe.int/T/e/Cultural%5FCo%2Doperation/Environment/

County of Istria (1999), *The final proposal on physical plan: The Report on Public proceedings*. In Croatian: *Županija Istarska, 1999. Konačni prijedlog prostornog plana županije Istarske*. Izvješće s javne rasprave.

Croatian Government (1998), Act on public proceedings in the decision procedure of spatial plans. *Official Gazette*, 102/98. In Croatian: Vlada Republike Hrvatske, 1998. Odluka o javnoj raspravi u postupku donošenja prostornih planova. *Narodne novine*, 102/98.

Croatian Parliament (1996), Law on Convention on Biological Diversity. *Official Gazette*, Int. Agreements 6/96. In Croatian: Sabor Republike Hrvatske, 1996. Zakon o potvrđivanju Konvencije o biološkoj raznolikosti. *Narodne novine*, međunarodni ugovori 6/96.

Davies, A. R. (2001), What Silence Knows-Planning, Public Participation and Environmental Values. *Environmental Values*, 10: 77-102.

Golobič, M. (2002), Participative, expert or unplanned landscape – is there a room for synergy? In: D. Ogrin, I. Marušič, I. and T. Simonič (Eds.), Landscape Planning in the Era of Globalisation, *Proceedings of the International Conference on Landscape Planning*. Biotechnical faculty University of Ljubljana. Ljubljana.

Healey, P. (1996), The communicative turn in spatial planning theory and its implications for spatial strategy formulation. *Environment and Planning B: Planning and Design*, 23: 217-234.

Jacobs, M. (1991), *The Green Economy: Environment, Sustainable Development and the Politics of Future*. Pluto Press. London.

Jacobs, M. (1995), Justice and sustainability. In: J. Lovenduski and J. Stanyer (Eds.), Contemporary Political Studies. *Proceedings of the Political Studies Association*. Political Studies Association. Belfast.

Jacobs, P. (1996), Environmental Parentheses and Design Metaphors. In: D. Ogrin (Ed.), Nature conservation outside protected areas, *Proceedings of the International Conference*. Ministry of Environment and Physical Planning and Biotechnical faculty University of Ljubljana. Ljubljana.

Lafferty, W. M. (1995), The implementation of sustainable development in the European Union. In: J. Lovenduski and J. Stanyer (Eds.), Contemporary Political Studies. *Proceedings of the Political Studies Association*. Political Studies Association. Belfast.

Lyle, J. T. (1985), *Design for Human Ecosystems*. Van Nostrand Reinhold. New York.

Marušič, I. (1996), Towards a general conservation theory. In: D. Ogrin (Ed.), Nature conservation outside protected areas, *Proceedings of the International Conference*. Ministry of Environment and Physical Planning and Biotechnical faculty University of Ljubljana. Ljubljana.

Marušič, I. (2002), Some observations regarding the education of landscape architects for the 21st century. *Landscape and urban planning,* 60(2): 95-103.

Mitchell, W. J. (1977), *Computer-aided Architectural Design*. Petrocelli. New York.

O'Riordan, T. (1985), What does sustainability really mean? Theory and development of concepts of sustainability. In: Sustainable Development in an Industrial Economy, *Conference proceedings*. Cambridge.

O'Riordan, T. (1995), Managing the global commons. In: T. O'Riordan (Ed.), *Environmental Science for Environmental Management*. Harlow. Longman. 347-360.

Šeparović, I. (1995), REC: *Status of Public Participation in Environmental Decision making in Central and Eastern Europe: Croatia*. http://www.rec.org./REC/Publications/Ppstatus/Croatia.html

Simon, H. A. (1981), *The Science of the Artificial*. MIT. Cambridge.

Taylor, P. W. (1986), *Respect for Nature: A Theory of Environmental Ethics*. New York. Springer.

Planiranje za održivi razvoj: značenje različitosti društvenog interesa za krajobraz

Sonja BUTULA
Agronomski fakultet, Zagreb

Tema rada jest održivi razvoj shvaćen kao temeljno načelo aktivnosti planiranja, svrha kojega je zaštititi i/ili unaprijediti sve ono u prostoru što kao društvo cijenimo. Ta je aktivnost često usmjerena prema krajobrazu. Karakteristično za naslijeđe vrednovanja krajobraza u hrvatskoj stručnoj javnosti jest da se vrijednosti krajobraza percipiraju kao vizualno-estetska kategorija. Ideja zaštite u planiranju manje se stoga usredotočuje na vrijednosti ili kvalitete željenih stanja krajobraza, koja su rezultat projekcije različitih i redovito suprotnih interesa: razvojnog i zaštitnog. U ovom se radu bavimo karakterom i vrstama tih potonjih vrijednosti te njihovom ulogom u primjeni načela održivosti unutar postupaka zaštitnog planiranja. Prvo se ukazuje na značenje i poimanje održivog razvitka, a potom se obrazlažu mogući razlozi nesuglasica i kontradikcija oko interpretacija održivog razvitka. U nastavku se predlaže pristup vrednovanju krajobraza koji istovremeno omogućuje njegovu što učinkovitiju zaštitu i razvoj. Praksa ostvarivanja koncepta održivog razvoja u Hrvatskoj s aspekta zaštitnog planiranja analizira se u trećem dijelu članka. Kao problemska područja izdvajaju se mehanizam sudjelovanja javnosti u procesu pripreme i donošenja odluka o namjeni prostora te planerski alati za vrednovanje prostora.

Pläne zur nachhaltigen Entwicklung: Unterschiedliches gesellschaftliches Interesse an der Umwelt und seine Bedeutung

Sonja BUTULA
Fakultät für Landwirtschaft, Zagreb

Das Thema dieses Aufsatzes ist die nachhaltige Entwicklung aufgefasst als Grundprinzip jeglichen Planens für die Zukunft, zu dessen Zielen der Schutz und/oder die Förderung all dessen gehört, das wir als Gesellschaft an unserer

Umwelt schätzen. Die Aktivität des Planens ist häufig auf unsere Umwelt ausgerichtet. Charakeristisch für die kroatische Sichtweise ist, dass die landschaftlichen Vorzüge unserer Umwelt als visuell-ästhetische Kategorien gewertet werden. Die Idee des Planens unter Berücksichtigung des Umweltschutzes konzentriert sich daher weniger auf den Wert oder die Qualität des erwünschten Umweltzustandes, der aus der Projizierung unterschiedlicher und in der Regel stets gegensätzlicher Interessen hervorgeht: aus dem Streben nach Entwicklung einerseits und Schutzmaßnahmen andererseits. Diese Arbeit widmet sich dem Charakter und den Arten von Werten, die gemäß dem Schutzprinzip angestrebt werden, und untersucht die Rolle, die diese Werte bei der Umsetzung des Nachhaltigkeits-Prinzips im Rahmen von Entwicklungsplänen spielen, die den Umweltschutz mit einschließen. Der Autor verweist zunächst auf mögliche Ursachen, die Unstimmigkeiten und widerstreitende Standpunkte zu Begriff, Bedeutung und Auslegung des Nachhaltigkeitsprinzips hervorrufen könnten, und bietet sodann plausible Erklärungen an. Im Folgenden wird ein Ansatz zur Wertung der Umwelt vorgeschlagen, der sowohl ihre Entwicklung als zugleich auch wirkungsvolle Maßnahmen zu ihrem Schutz umfasst. Der dritte Teil des Aufsatzes widmet sich der Umsetzung des Konzeptes der nachhaltigen Entwicklung in Kroatien unter dem Gesichtspunkt des Einbezugs von Umweltschutzmaßnahmen.